



DRAFT - New Zealand ENERGY STAR[®] Solar Water Heating Specification

Following are the product criteria for ENERGY STAR qualified Solar Water Heating systems. A system must meet all of the criteria to be identified as ENERGY STAR qualified by its manufacturer.

1. Definitions

- a) Packaged solar water heating system – a system with a fixed configuration, sold as a ready-to-install kit containing all system components
- b) Residential sized – a system with a maximum storage capacity of 700 litres.

2. Qualifying Products

Residential sized packaged solar water heating systems that:

- a) comply with AS/NZS 2712:2007
- b) can be performance rated by AS/NZS 4234:2008
- c) meet the criteria below.

3. Performance Criteria

A systems displaced energy divided by the annual purchased energy consumption of the reference water heater in New Zealand must be equal or greater than 70 per cent, when calculated using AS/NZS 4234:2008 for Zone 5.

ANNUAL PURCHASED ENERGY CONSUMPTION OF REFERENCE WATER HEATERS IN NEW ZEALAND	
Water Heater Type	Peak winter daily load, MJ/d (Zone 5)
Electric large load	52
Electric medium load	39
Electric small load	25.6



Gas storage 3 star large load	52
Gas storage 3 star medium storage load	39
Gas storage 3 star small load	25.6

4. Test Criteria

Manufacturers must have their packaged solar water heating system performance modeled and provide corresponding report in accordance with AS/NZS 4234:2008.

Manufacturers must have their packaged solar water heating system tested and provide compliance certificate in accordance with AS/NZS 2712:2007.

The supplier must provide a copy of the compliance schedule and test report carried out by an Approved test facility with the packaged system registration form as specified below.

Approved Test Facility

An Approved Test Facility is a test facility that:

- Is covered by the ILAC (International Laboratory Accreditation Cooperation) agreement to test to the applicable standard; or
- EECA has stated its acceptance of test reports from the facility for the applicable standard (see EECA for details on how to become approved).

For a list of countries signed up to the International Laboratory Accreditation Cooperation agreement and their respective national testing organization please refer to the IANZ (International Accreditation New Zealand) website www.ianz.govt.nz.

5. Effective Date

The effective date of this criteria is 1 June 2010.

6. Countries Valid In

This specification applies to products sold in New Zealand only.